

January 16, 2006

Selica Potter
Acting Clerk to the Board
P.O. Box 100 Sacramento, CA 95812-0100

COMMENT LETTER – 1/31/06 BOARD WORKSHOP ON SALINITY

Dear Ms. Potter:


Attached is a presentation I request to give at the subject workshop on salinity, 1/31/06 on behalf of the San Joaquin River Water Quality Management Group.

I intend only to go through slides 1-11, with the remainder of the slides available to address questions that may arise. Please contact me at 916.489.9280 if you have questions. Enclosed also is a Powerpoint version of the slide presentation so that you may load it into the Board's computer at the workshop.

Sincerely,

A handwritten signature in black ink, appearing to read "Byron Buck", with a long, sweeping horizontal line extending to the right.

Byron M. Buck
Facilitator, San Joaquin River Water
Quality Management Group



Recommendations and Status Report of the San Joaquin Water Quality Management Group

**Plan for Achieving Salinity/Boron and DO
Objectives**

Presentation to SWRCB 1/31/06

Plan for Achieving Salinity/Boron and DO Objectives

Overview

- **Review Group and Objectives**
- **Recommendations and Expected Outcomes**
- **Current Status**

Plan for Achieving Salinity/Boron and DO Objectives

List of Participants

- U.S. Bureau of Reclamation
- Department of Water Resources
- USFWS
- California Dept. Fish and Game
- Central California Irrigation District
- Friant Water Users Authority
- Grassland Water District
- James Irrigation District
- Merced Irrigation District
- Modesto Irrigation District
- Oakdale Irrigation District
- San Luis Canal Company
- San Joaquin County and Delta Water Quality Coalition
- San Joaquin County RCD
- San Joaquin River Exchange Contractors Water Authority
- San Joaquin Valley Drainage Authority
- San Joaquin River Group
- San Luis and Delta Mendota Water Authority
- South San Joaquin Irrigation District
- State Water Contractors
- South Delta Water Agency
- Stockton East Water District
- Tranquility Irrigation District
- Turlock Irrigation District
- Venice Island RD 2023
- California Farm Bureau
- Western Growers

Plan for Achieving Salinity/Boron and DO Objectives

- Group Objective: *Prepare and implement a plan to meet the water quality objectives for Salt and Boron at Vernalis and Dissolved Oxygen at the Stockton Deep Water Ship Channel in coordination with CALFED Stage I objectives*

SJRWQMG Recommendations

Salinity

1. Fully implement the Westside Regional Drainage Plan.

***status**: Prop 50, Consolidated Grants and Federal funding pursued to supplement local funding*

2. Further evaluate and pursue managed wetland drainage management action to mitigate impacts of February through April drainage releases.

***status** : **three** - yr. pilot project underway to assess water quality and biological effects of modified refuge draw-down operations to reduced saline discharges. Budget of \$1.2 million from CALFED and the participating agencies.*

Summary Recommendations cont.

Salinity

3. Develop a real-time water quality management coordination group involving LSJR tributaries, LSJR drainers and the DWR to coordinate reservoir release and SWP/CVP Project operations (head of Old River barrier and New Melones operations) to realize opportunities to improve water quality and increase the utility of stored water releases.

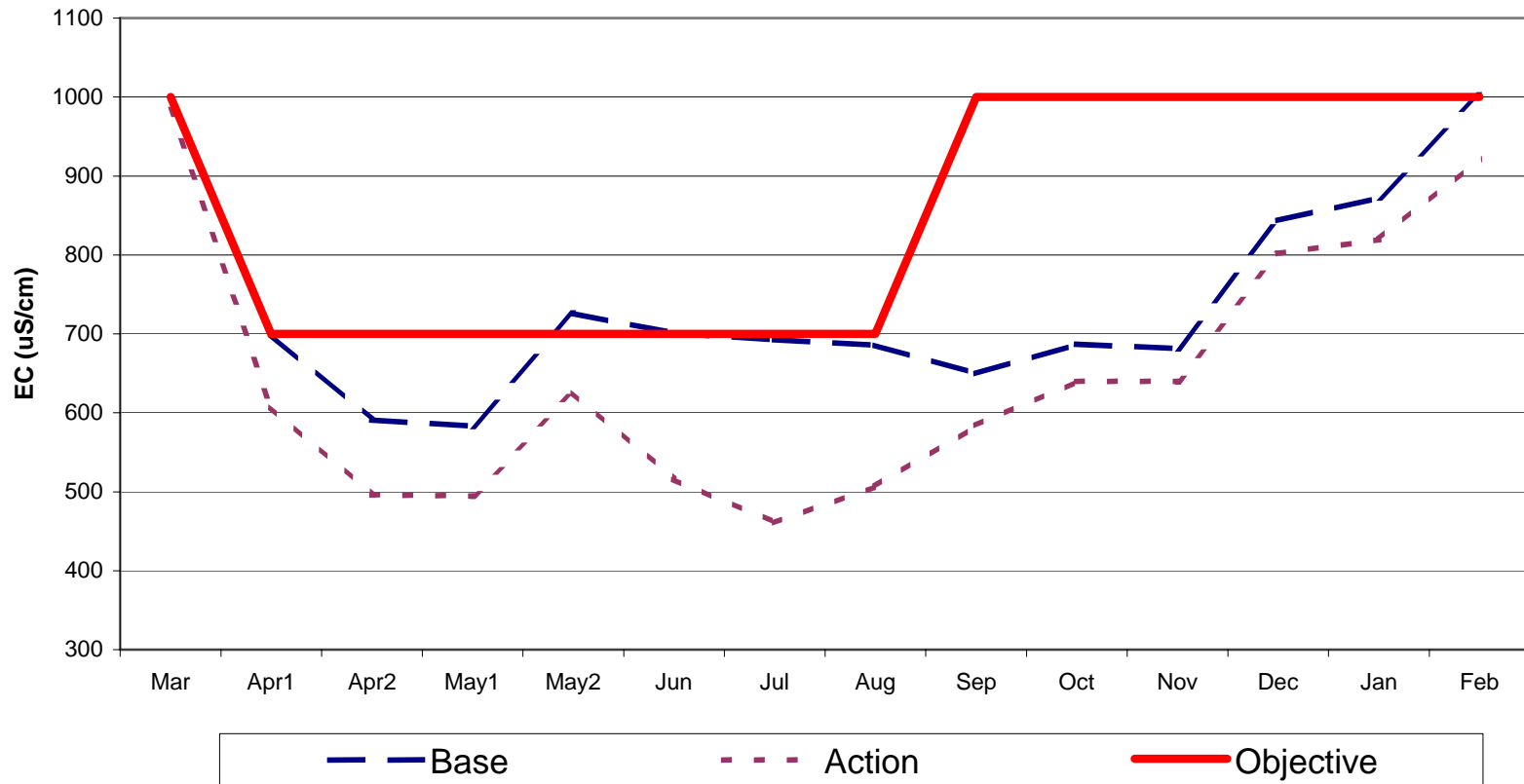
status: *initial meeting held and agreement reached to begin with coordinated efforts to utilize new real-time data available and begin more regular reservoir release coordination.*

Summary Recommendations cont.

5. Establish a forum to evaluate ongoing changes in the water quality baseline and suggest further management actions to continue progress on water quality improvement.

status : *water quality management group to continue*

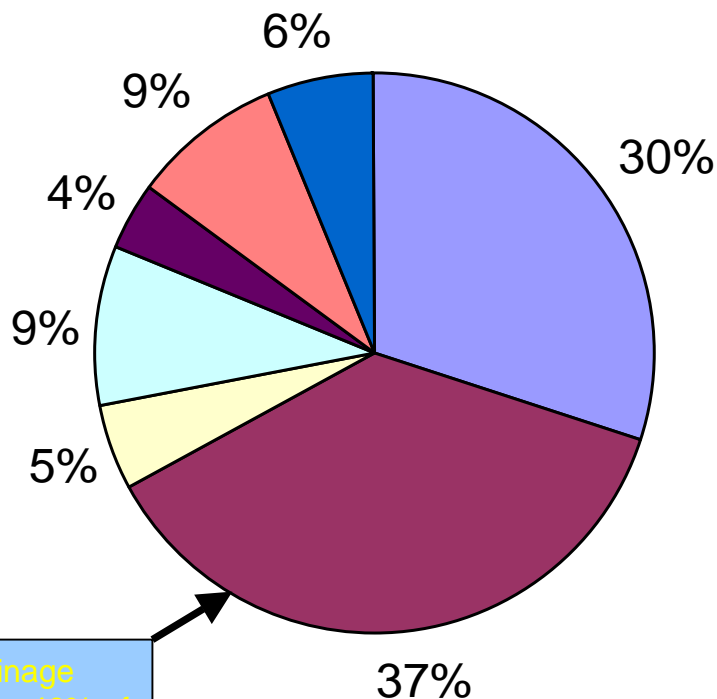
Salinity Improvement at Vernalis from Recommendations – Critical Water Year Average



Gross Salt Reduction

Salt Sources Lower SJR

Total Avg. Load 1.1 m tons/yr



Westside Drainage
Plan eliminates 46% of
this load

- Northwest Side
- Grasslands Watershed
- East Valley Floor
- SJR Upstream of Lander Ave
- Merced
- Tuolumne
- Stanislaus

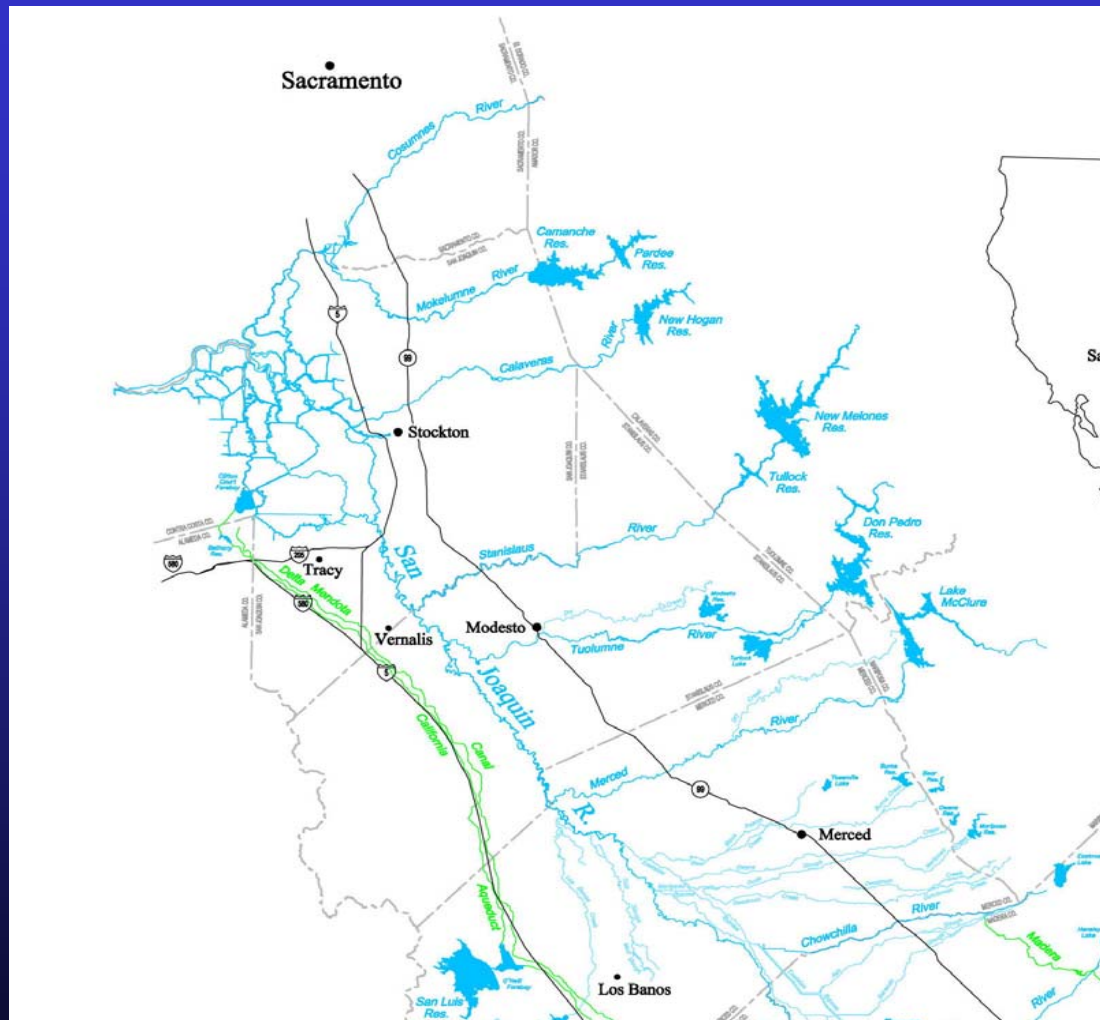
Implementation Roles

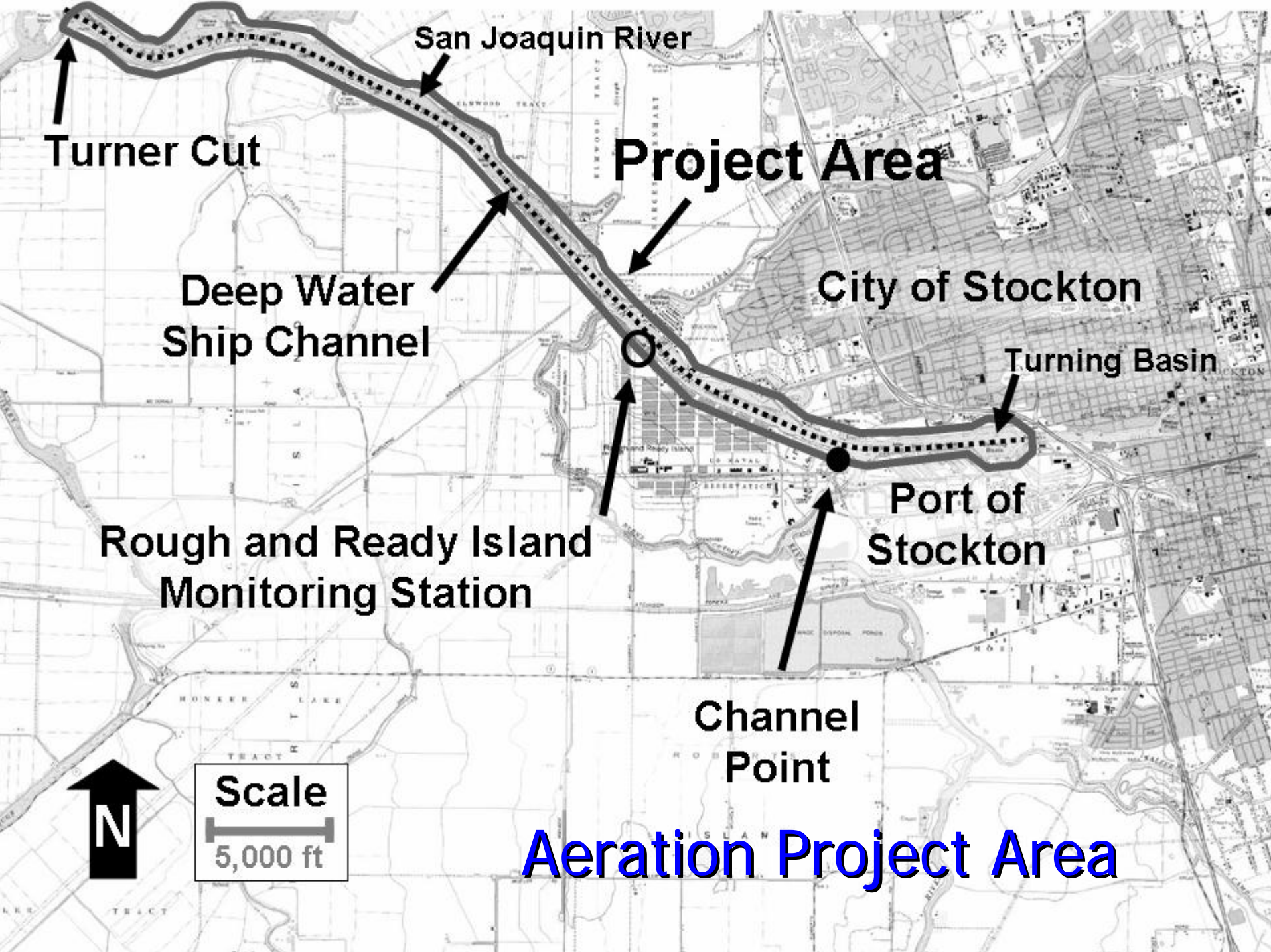
<u>Recommendation</u>	<u>Agency Role/Participant</u>		
	<u>Local</u>	<u>State</u>	<u>Federal</u>
<u>Salinity</u>			
Implement Westside Drainage	Drainage agencies	DWR/SWRCB SRWQCB	USBR
Wetlands Drainage Management	Refuges	DFG/SWRCB SRWQCB	USBR FWS
Real Time SJR Operations Coordination	Various	DWR (barriers)	USBR
<u>Dissolved Oxygen</u>			
HORB Use		DWR	USBR
		DFG	FWS/NMFS
Stockton Treatment Plant Upgrade	Stockton	SRWQCB	
Demonstration Aerator	Port others	DWR; CALFED	
Future Actions Evaluation/Change Forum	Various	DWR SWRCB DFG	USBR FWS/NMFS

Summary

- SJWQMG solutions have broad consensus for implementation
- SJRWQMG Group needs to continue
 - Pursue solution
 - Adapt to changes
- State and Federal Agency Commitment Necessary to assist in Plan Implementation: DWR Agrees to Lead Joint Agency Task Force

Extra slides





San Joaquin River

Turner Cut

Project Area

Deep Water
Ship Channel

City of Stockton

Turning Basin

Rough and Ready Island
Monitoring Station

Port of
Stockton

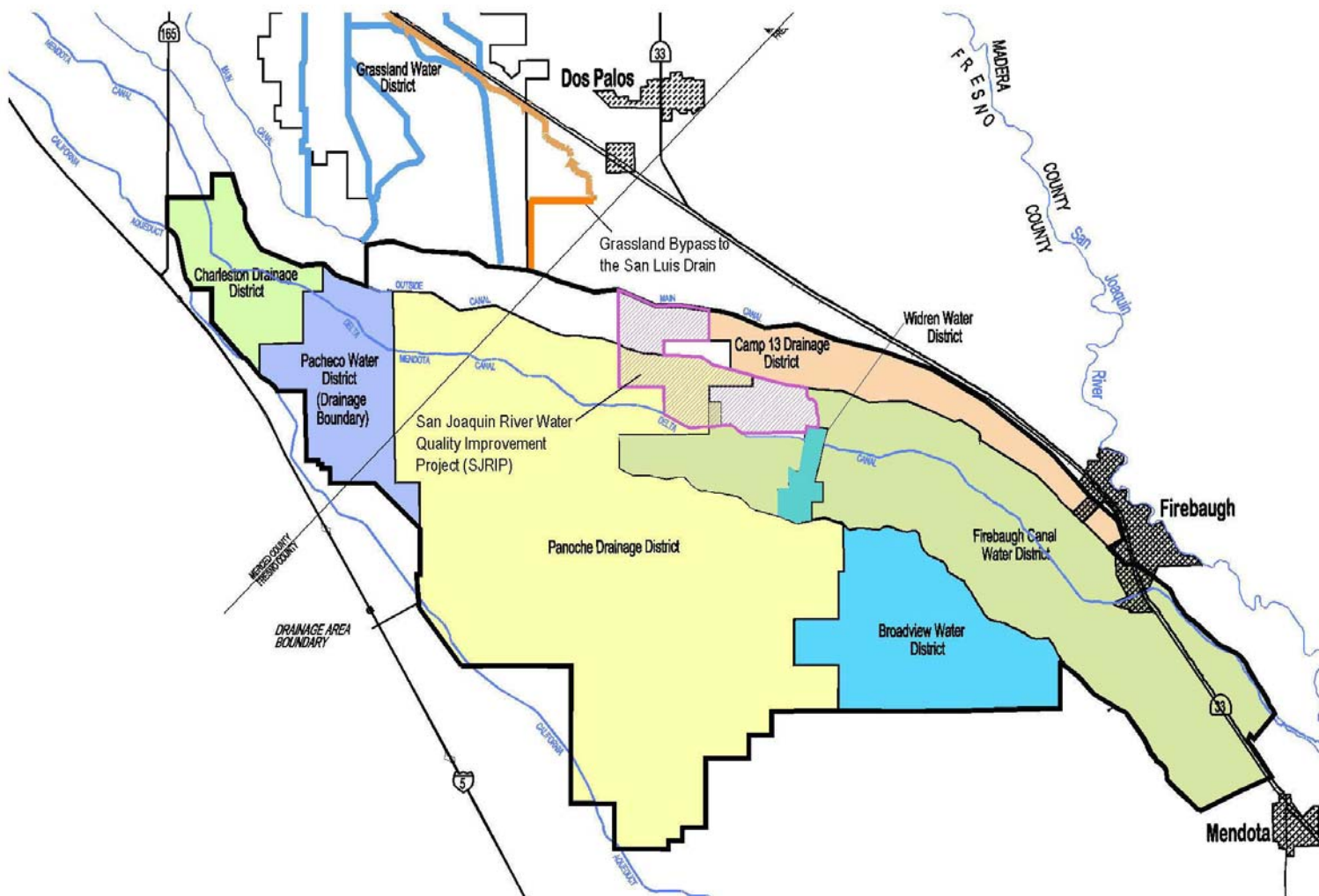
Channel
Point

Aeration Project Area

Scale

5,000 ft

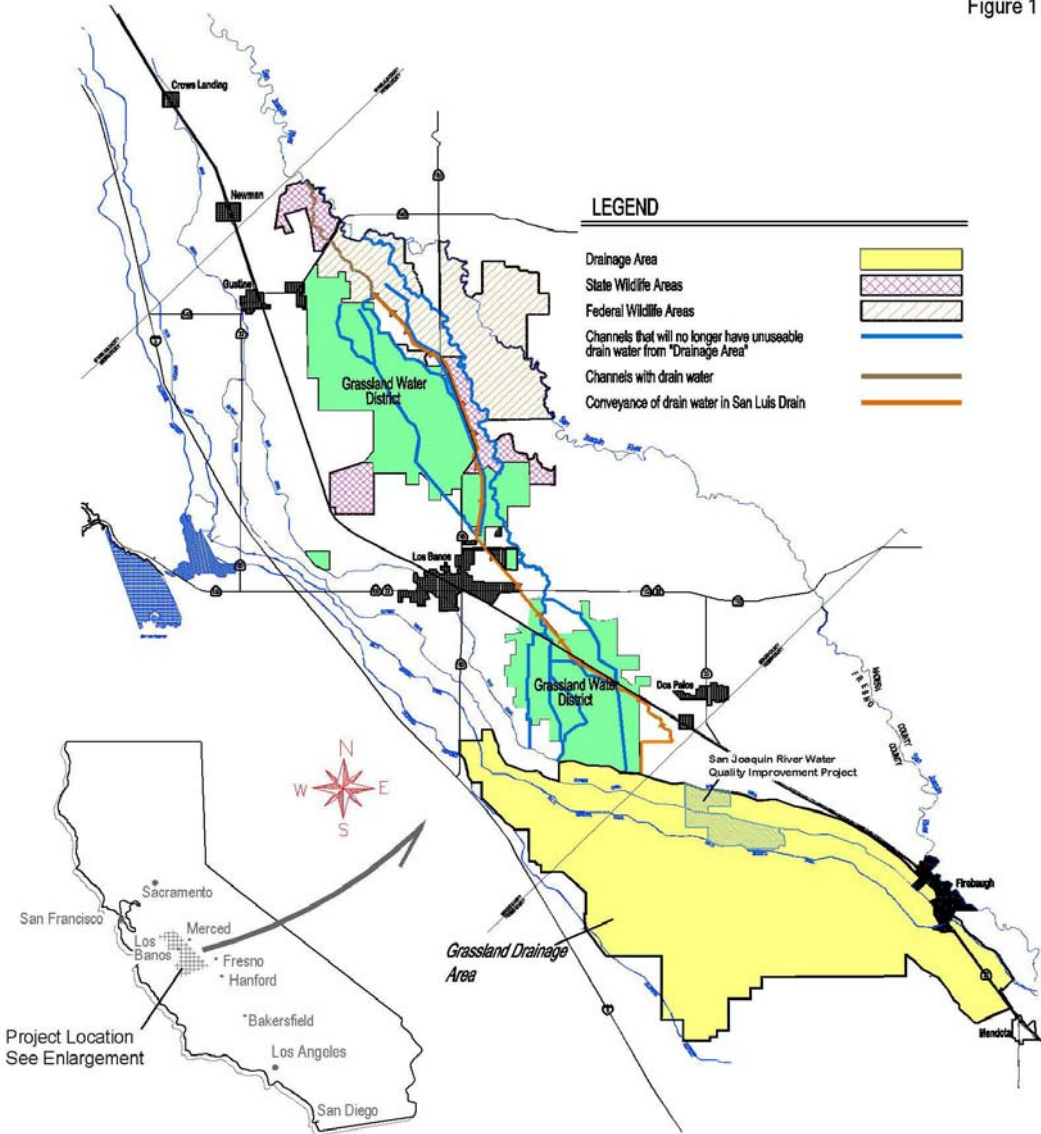
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**Grassland Drainage Area
San Joaquin River Water Quality
Improvement Project
Location Map**

SUMMERS ENGINEERING, INC.
Consulting Engineers
HANFORD CALIFORNIA
SEPTEMBER 2003

Figure 1



STATE OF CALIFORNIA

Grassland Drainage Area Location Map

SUMMERS ENGINEERING, INC.
Consulting Engineers
HANFORD CALIFORNIA
NOVEMBER 2003

Drainage Reduction Process

Current Drainage
Production
40,000 AF

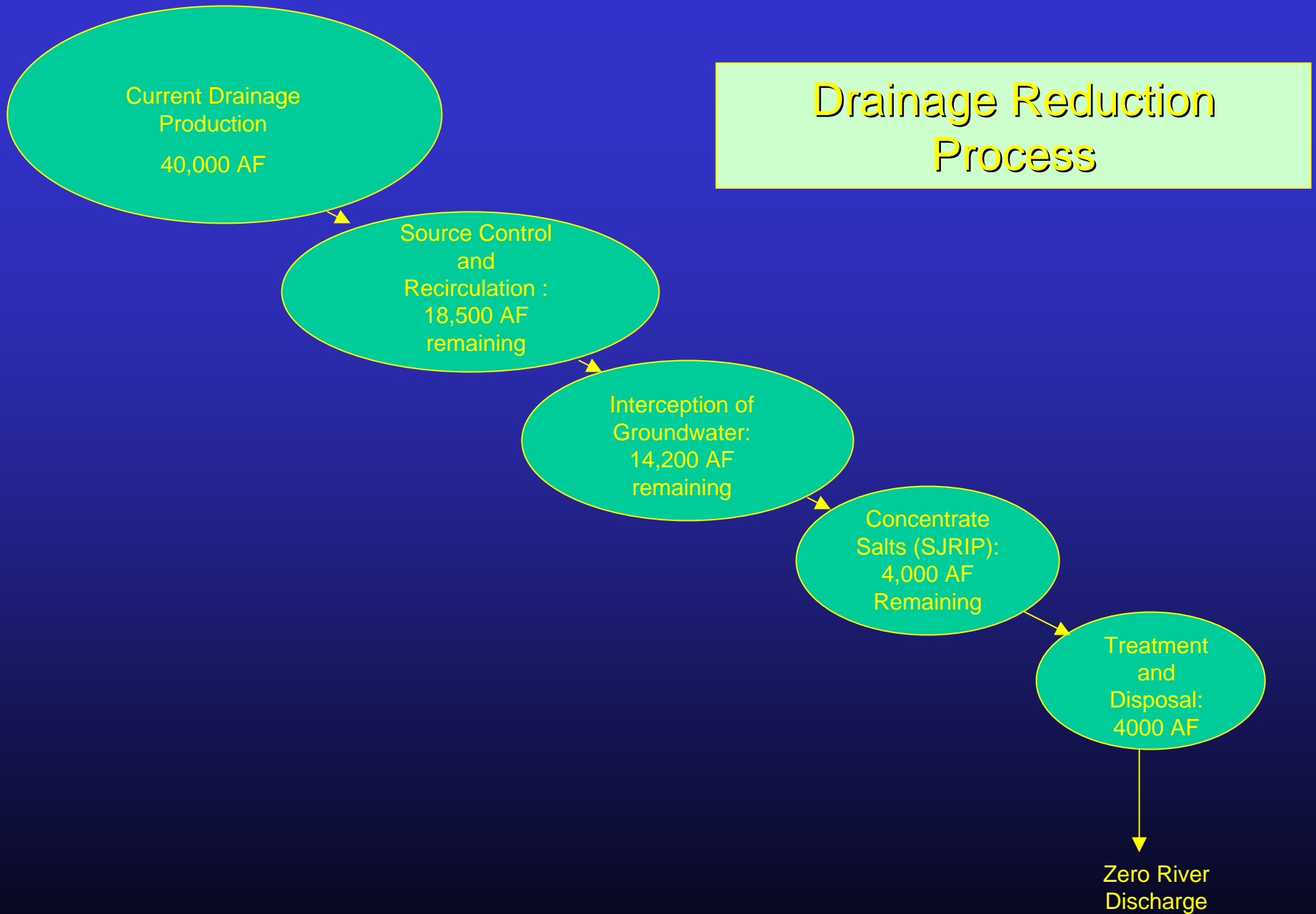
Source Control
and
Recirculation :
18,500 AF
remaining

Interception of
Groundwater:
14,200 AF
remaining

Concentrate
Salts (SJRIP):
4,000 AF
Remaining

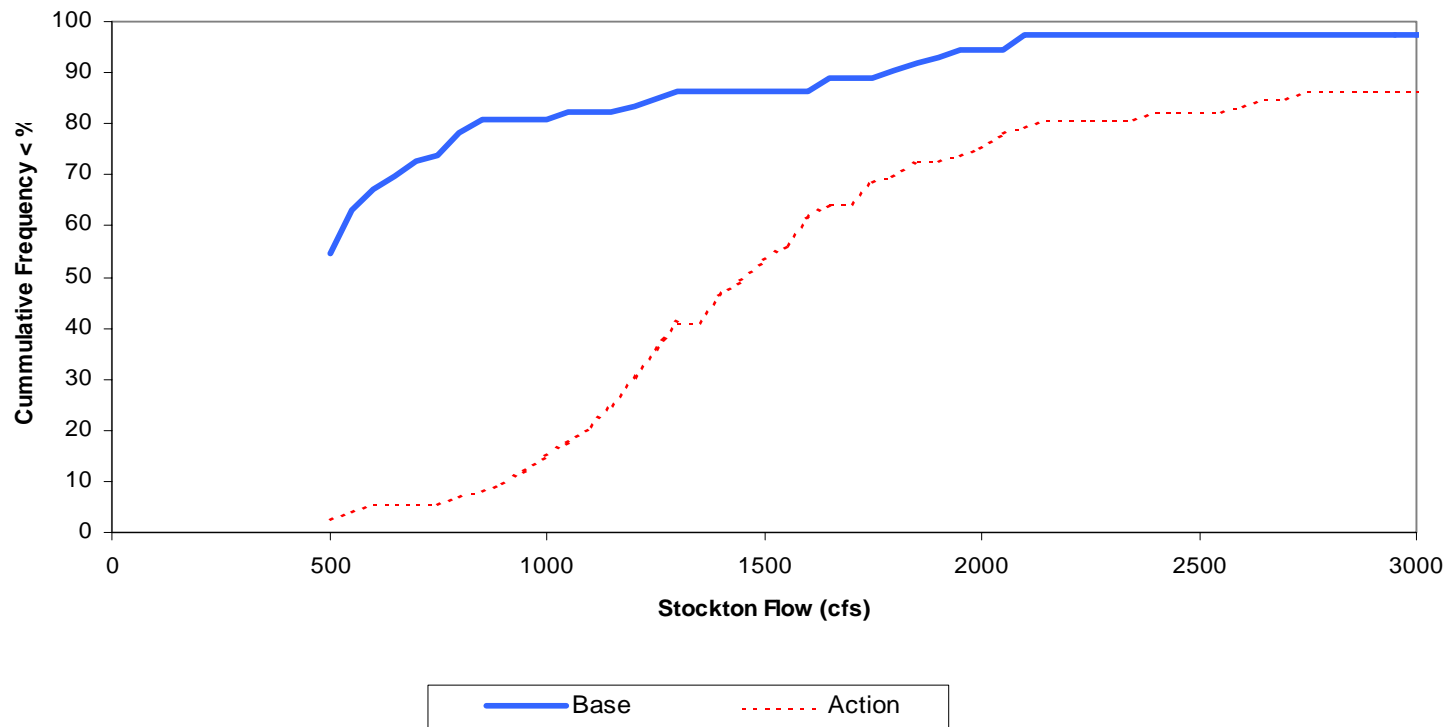
Treatment
and
Disposal:
4000 AF

Zero River
Discharge

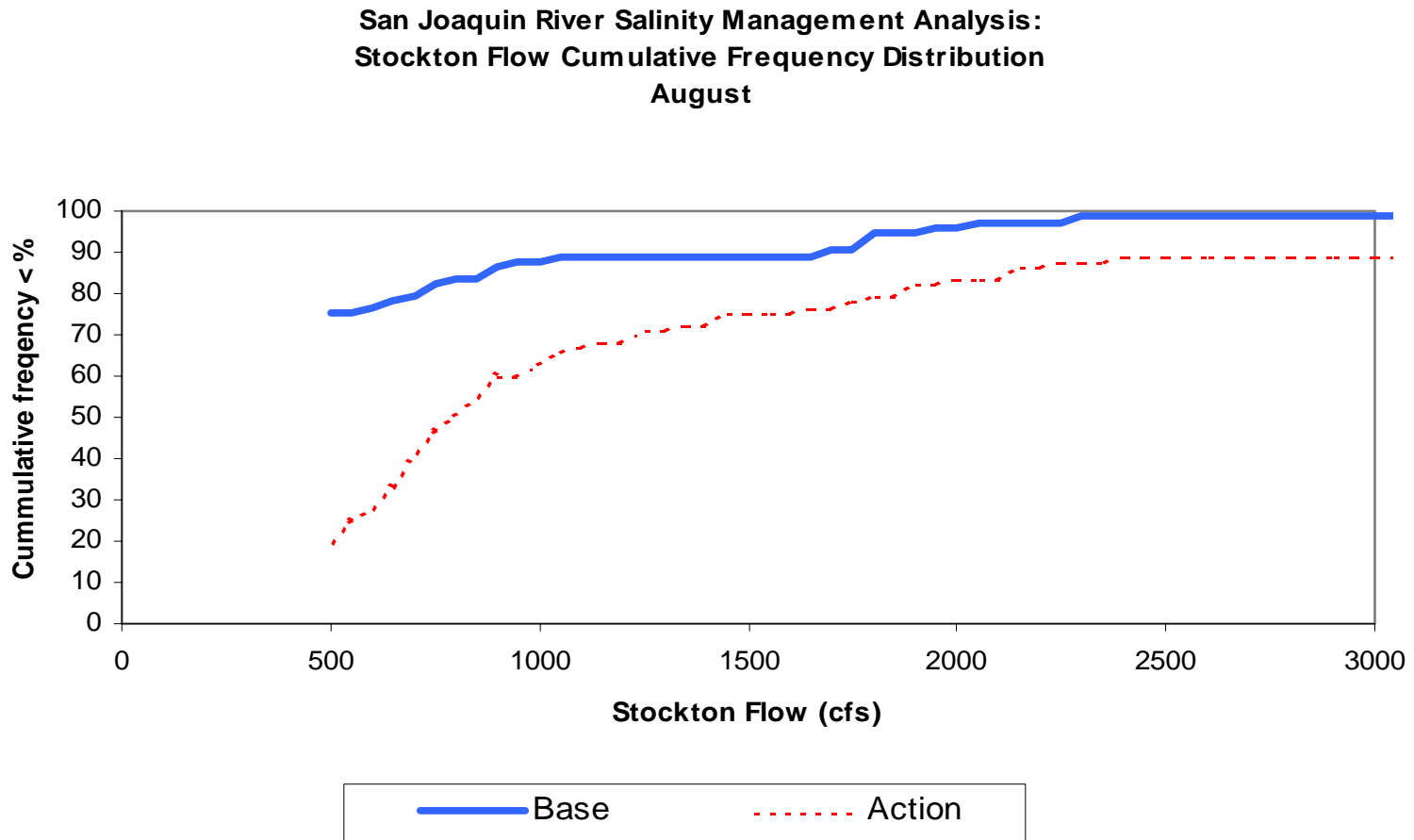


Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton September

San Joaquin River Salinity Management Analysis:
Stockton Flow Cumulative Frequency Distribution
September



Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton - August



Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton - September

